Attorney Docket No. PB60739

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: ALLEN, et al.

Serial No.:   10/596561   Group Art Unit No.: 1625

Filed: 16-Jun-2006   Examiner: Rahmani, Niloofar

For: PYRAZOLO [3,4-B] PYRIDINE COMPOUNDS, AND THEIR USE AS
              PHOSPHODIESTRERASE INHIBITORS

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE TO RESTRICTION REQUIREMENT

This paper is in response to the Restriction Requirement mailed 13 September 2006,
having a shortened statutory period for reply of 1 month. Claims 1-6, 9 and 10 are pending in
the application. Claims 1-6, 9 and 10 are subject to a restriction requirement and/or election
requirement. Applicants desire to reply as follows.

Restriction to one of the following is required under 35 U.S.C. §121 and 372:

Group I.   Claims 73-123 and 128-135, drawn to compound of formula (I),
            wherein **Ar** being formula (x) and in sub-formula (x), **A** being C-R^{6A},
            B being C-R^{6B}, **D** being C-R^{6D}, **E** being C-R^{6E}, **F** being C-R^{6F};
            classified in class 546, subclass various. If this group is elected, a
            further election of a single disclosed species of compound is also
            required. Further restriction based on the species election may be
            required.

Group II.   Claims 73-123 and 128-135, drawn to compound of formula (I),
            wherein **Ar** being formula (x) and in sub-formula (x), **A** being nitrogen
            or $\text{N}^{+}\text{-0}^{-}$, **B** being C-R^{6B}, **D** being C-R^{6D}, **E** being C-R^{6E}, **F** being C-R^{6F}
            classified in class 546, subclass various. If this group is elected, a
            further election of a single disclosed species of compound is also
            required. Further restriction based on the species election may be
            required.

Group III. Claims 73-123 and 128-135, drawn to compound of formula (I),
            wherein **Ar** being formula (x) and in sub-formula (x), **A** being nitrogen
            or $\text{N}^{+}\text{-0}^{-}$, **B** being C-R^{6B}, **D** being C-R^{6D}, **E** being C-R^{6E}, **F** being C-
            R^{6F}, classified in class 546, subclass various. If this group is elected, a

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further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group IV.   Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (x), **A** being C-R^{6A},, **B** being C-R^{6B}, **D** being nitrogen or N$^+$-0$^-$, **E** being C-R^{6E}, **F** being C-R^{6F}, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group V.   Claims 73 -123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (x), **A** being **A** being C-R^{6A}, **B** being C-R^{6B}, **D** being C-R^{6D}, **E** being nitrogen or N$^+$-0$^-$, **F** being C-R^{6F}, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group VI..   Claims 73-1 23 and 128-1 35, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (x), **A** being C-R^{6A}, **B** being C-R^{6B}, **D** being C-R^{6D}, **E** being C-R^{6E}, **F** being nitrogen or N$^+$-0$^-$, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group VII.   Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (x), **A** being nitrogen or N$^+$-0$^-$, **B** being nitrogen or N$^+$-0$^-$, **D** being C-R^{6D}, **E** being C-R^{6E}, **F** being C-R^{6F}, classified in class 544, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group VIII.   Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (x), **A** being nitrogen or N$^+$-0$^-$, **B** being C-R^{6B}, **D** being nitrogen or N$^+$-0$^-$, **E** being C-R^{6E}, **F** being C-R^{6F}, classified in class 544, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group IX.   Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (x), **A** being nitrogen or N$^+$-0$^-$, **B** being C-R^{6B}, **D** being C-R^{6D}, **E** being nitrogen or N$^+$-0$^-$, **F** being C-R^{6F}, classified in class 544, subclass various. If this group is

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elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group X.   Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (x), **A** being nitrogen or N^+-0^-, **B** being C-R^{6B}, **D** being C-R^{6D}, **E** being C-R^{6E}, **F** being nitrogen or N^+-0^-, classified in class 544, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XI.   Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (x), **A** being C-R^{6A}, **B** being nitrogen or N^+-0^-, **D** being nitrogen or N^+-0^-, **E** being C-R^{6E}, **F** being C-R^{6F}, classified in class 544, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XII.   Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (x), **A** being C-R^{6A}, **B** being nitrogen or N^+-0^-, **D** being C-R^{6D}, **E** being nitrogen or N^+-0^-, **F** being C-R^{6F}, classified in class 544, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XIII.   Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (x), **A** being C-R^{6A}, **B** being nitrogen or N^+-0^-, **D** being C-R^{6D}, **E** being C-R^{6E}, **F** being nitrogen or N^+-0^-, classified in class 544, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XIV.   Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (x), **A** being C-R^{6A}, **B** being C-R^{6B}, **D** being nitrogen or N^+-0^-, **E** being nitrogen or N^+-0^-, **F** being C-R^{6F}, classified in class 544, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XV.   Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (x), **A** being C-R^{6A}, **B** being C-R^{6B}, **D** being nitrogen or N^+-0^-, **E** being C-R^{6E}, **F** being nitrogen or N^+-0^-, classified in class 544, subclass various. If this

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group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XVI.   Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (x), **A** being C-R^{6A}, **B** being C-R^{6B}, **D** being C-R^{6D}, **E** being nitrogen or N^{+}-0^{-}, **F** being nitrogen or N^{+}-0^{-}, classified in class 544, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XVII.   Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being O, **J** being C-R^{6J}, or C-[connection point to formula (I)], **L** being C-R^{6L}, or C-[connection point to formula (I)], **M** being C-R^{6M}, or C-[connection point to formula (I)], **Q** being C-R^{6Q}, or C-[connection point to formula (I)], classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XVIII. Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being S, **J** being C-R^{6J}, or C-[connection point to formula (I)], **L** being C-R^{6L}, or C-[connection point to formula (I)], **M** being C-R^{6M}, or C-[connection point to formula (I)], **Q** being C-R^{6Q}, or C-[connection point to formula (I)], classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XIX.   Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being N, **J** being C-R^{6J}, or C-[connection point to formula (I)], **L** being C-R^{6L}, or C-[connection point to formula (I)], **M** being C-R^{6M}, or C-[connection point to formula (I)], **Q** being C-R^{6Q}, or C-[connection point to formula (I)], classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XX.   Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being 0, **J** being C-R^{6J}, or C-[connection point to formula (I)], **L** being C-R^{6L}, or C-[connection point to formula (I)], **M** being C-R^{6M}, or C-[connection point to formula (I)], **Q** being C-R^{6Q}, or C-[connection point to formula (I)], classified in class 546, subclass various. If this group is

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elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXI. (Incorrectly identified as XVII) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being O, **J** being C-R^{6J}, **L** being C-R^{6L}, **M** being C-R^{6M}, **Q** being C-R^{6Q}, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXII. (Incorrectly identified as XVIII) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being O, **J** being C-R^{6J}, **L** being C-R^{6L}, **M** being C-R^{6M}, **Q** being C-R^{6Q}, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.**[SAME AS GROUP XXI?]**

Group XXIII. (Incorrectly identified as XIX) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being O, **J** being C-R^{6J}, **L** being C-R^{6L}, **M** being C-R^{6M}, **Q** being C-R^{6Q}, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.**[SAME AS GROUP XXI?]**

Group XXIV. (Incorrectly identified as XX) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being O, **J** being nitrogen, **L** being C-R^{6L}, **M** being C-R^{6M}, **Q** being C-R^{6Q}, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXV. (Incorrectly identified as XXI) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being O, **J** being C-R^{6J}, **L** being nitrogen, **M** being C-R^{6M}, **Q** being C-R^{6Q}, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXVI. (Incorrectly identified as XXII) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being O, **J** being C-R^{6J}, **L** being C-R^{6L}, **M** being nitrogen, **Q** being C-R^{6Q}, classified in class 546, subclass various. If

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this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXVII. (Incorrectly identified as XXIII) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being O, **J** being C-R^{6J}, **L** being C-R^{6L}, **M** being C-R^{6M}, **Q** being nitrogen, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXVIII. (Incorrectly identified as XXIV) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being S, **J** being nitrogen, **L** being C-R^{6L}, **M** being C-R^{6M}, **Q** being C-R^{6Q}, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXIX. (Incorrectly identified as XXV) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being S, **J** being C-R^{6J}, **L** being nitrogen, **M** being C-R^{6M}, **Q** being C-R^{6Q}, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXX. (Incorrectly identified as XXVI) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being S, **J** being C-R^{6J}, **L** being C-R^{6L}, **M** being nitrogen, **Q** being C-R^{6Q}, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXXI. (Incorrectly identified as XXVII) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being S, **J** being C-R^{6J}, **L** being C-R^{6L}, **M** being C-R^{6M}, **Q** being nitrogen, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXXII. (Incorrectly identified as XXVIII) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being N, **J** being nitrogen, **L** being C-R^{6L}, **M** being C-R^{6M}, **Q** being C-R^{6Q}, classified in class 546, subclass various. If this

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group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXXIII. (Incorrectly identified as XXIX) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being N, **J** being C-R^{6J}, **L** being nitrogen, **M** being C-R^{6M}, **Q** being C-R^{6Q}, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXXIV. (Incorrectly identified as XXX) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being N, **J** being C-R^{6J}, **L** being C-R^{6L}, **M** being Nitrogen, **Q** being C-R^{6Q}, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXXV. (Incorrectly identified as XXXI) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being N, **J** being C-R^{6J}, **L** being C-R^{6L}, **M** being C-R^{6M}, **Q** being Nitrogen, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXXVI. (Incorrectly identified as XXXII) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being C, **J** being Nitrogen, **L** being C-R^{6L}, **M** being C-R^{6M}, **Q** being C-R^{6Q}, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXXVII. (Incorrectly identified as XXXII) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being C, **J** being Nitrogen, **L** being C-R^{6L}, **M** being C-R^{6M}, **Q** being C-R^{6Q}, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXXVIII. (Incorrectly identified as XXXIII) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being C, **J** being C-R^{6J}, **L** Nitrogen, **M** being C-R^{6M}, **Q** being C-R^{6Q}, classified in class 546, subclass various. If this

group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXXIX. (Incorrectly identified as XXXIV) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being C, **J** being C-R^{6J}, **L** being C-R^{6L}, **M** being Nitrogen, **Q** being C-R^{6Q}, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXXX. (Incorrectly identified as XXXV) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), **G** being C, **J** being C-R^{6J}, **L** being C-R^{6L}, **M** being C-R^{6M}, **Q** being Nitrogen, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXXXI. (Incorrectly identified as XXXVI) Claims 73-123 and 128-135, drawn to compound of formula (I), wherein **Ar** being formula (x) and in sub-formula (z), wherein **G, J, L, M, Q**, being other than groups XVII-XXXV, classified in class 546, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.

Group XXXXII. (Incorrectly identified as XXXV) Claims 124-127, and 136, drawn to composition and method for treating an inflammatory disease using the compounds of formal (I), classified in class 514, subclass various. If this group is elected, a further election of a single disclosed species of compound is also required. Further restriction based on the species election may be required.